2016
Major Automated Information System
Annual Report

Teleport Generation 3 (Teleport Gen 3)

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations for MAIS Programs

Acq O&M - Acquisition-Related Operations and Maintenance
ADM - Acquisition Decision Memorandum
AoA - Analysis of Alternatives
ATO - Authority To Operate
APB - Acquisition Program Baseline
BY - Base Year
CAE - Component Acquisition Executive
CDD - Capability Development Document
CPD - Capability Production Document
DAE - Defense Acquisition Executive
DoD - Department of Defense
DoDAF - DoD Architecture Framework
FD - Full Deployment
FDD - Full Deployment Decision
FY - Fiscal Year
IA - Information Assurance
IATO - Interim Authority to Operate
ICD - Initial Capability Document
IEA - Information Enterprise Architecture
IOC - Initial Operational Capability
IP - Internet Protocol
IT - Information Technology
KPP - Key Performance Parameter
$M - Millions of Dollars
MAIS - Major Automated Information System
MAIS OE - MAIS Original Estimate
MAR – MAIS Annual Report
MDA - Milestone Decision Authority
MDD - Materiel Development Decision
MILCON - Military Construction
MS - Milestone
N/A - Not Applicable
O&S - Operating and Support
OSD - Office of the Secretary of Defense
PB - President’s Budget
RDT&E - Research, Development, Test, and Evaluation
SAE - Service Acquisition Executive
TBD - To Be Determined
TY - Then Year
U.S.C- United States Code
USD(AT&L) - Under Secretary of Defense for Acquisition, Technology, & Logistics

Program Information

Program Name

Teleport Generation 3 (Teleport Gen 3)

DoD Component

DoD

The acquiring DoD Component is the Defense Information Systems Agency.

Responsible Office

Program Manager

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References

MAIS Original Estimate

February 25, 2015

Approved APB

Component Acquisition Executive (CAE) Approved Acquisition Program Baseline (APB) dated June 15, 2015

Program Description

Department of Defense (DoD) Teleport is a collaborative investment within the Department and among the Services that provides deployed Warfighters with seamless worldwide multi-band Satellite Communication (SATCOM) reach-back capabilities to the Defense Information System Network (DISN). The DoD Teleport upgrades selected sites from the Standardized Tactical Entry Point (STEP) program, which only provides reach-back via X-band SATCOM and doesn't meet the growing throughput requirements of the deployed Warfighter.

The DoD Teleport upgrade adds communications support in the Ultra High Frequency (UHF), Extremely High Frequency, military Ka and Commercial (i.e., C and Ku) SATCOM frequency bands and represents a ten-fold increase to the throughput and functional capabilities of these STEP sites. The Teleport system provides deployed forces with interfaces for high-throughput multi-band and multimedia connectivity from deployed locations to DISN and DoD Information Network (DoDIN) information sources and support. Teleport capabilities are being deployed incrementally in a multi-generational program across multiple Fiscal Years (FY 2001-FY 2020); having completed Generation 1 and 2.

Teleport Generation 3 will field three satellite gateway enhancements, which will be implemented in three phases. Phase 1 will provide Advanced Extremely High Frequency Extended Data Rate capabilities to Warfighters worldwide by installing terminals from the Navy Multiband Terminal program at Teleport and other gateway sites. Teleport Generation 3 Phase 2 will provide enhanced Wide band Global System X/Ka-band capability to Warfighters worldwide by installing terminals from the Modernization of Enterprise Terminal program at Teleport and other gateway sites. Teleport Generation 3 Phase 3 will provide interoperability between Mobile User Objective System (MUOS) users and Legacy UHF users by installing MUOS-to-Legacy UHF SATCOM Gateway Component suites of equipment at Teleport/gateway sites. Integrating these enhancements will provide increased satellite connectivity through technology refreshment of older communication suites and expand the DoD Teleport system's capacity, throughput, and functional capabilities to greatly enhance support to tactical and deployed Warfighters worldwide.

Business Case

Business Case Analysis, including the Analysis of Alternatives (AoA): Key functional requirements for this program, which were articulated in the Operational Requirements Document (ORD) on May 20, 2010, are summarized as follows:

The DoD Teleport Program acquisition supports core, priority functions of the Department. Teleport directly supports DoD and DISA efforts to transition to a net-centric environment to transform the way DoD shares information by making data continuously available in a trusted environment. The Teleport system is an integral part of the GIG, as described in the approved GIG architecture. It also contributes to DoD core capabilities, most specifically those for Information Dominance and Interoperability that are required by Joint Vision 2020. On August 12, 2009, Office of the Secretary of Defense/Cost Assessment and Program Evaluation accepted the conclusions documented in the Generation 3 AoA and approved this document as being acceptable for implementing Generation 3. The original Teleport AoA was updated in November 2005 and examined six alternative concepts employing Commercial off-the-shelf (COTS) products to ensure standardized, proven equipment configurations to meet the Joint Staff validated capacity requirements and Key Performance Parameters (KPPs) contained in the ORD. Each alternative uses a standardized suite of equipment and other elements including the time phasing of equipment, the master list of equipment, and net-centric baseband. The component cost estimates were readily obtained since Generation Two used primarily non-developmental, commercially available equipment that was procured and used in other programs. The Generation 3 Phase 1 leveraged this AoA to formulate the Phase 1 architecture as part of the Critical Design Review (CDR) held on May 21, 2010, and subsequent CDR report that was approved by the Assistant Secretary of Defense, Networks and Information Integration, in a CDR Assessment Memorandum, signed August 3, 2010. Using the CDR baselined architecture, an Economic Analysis (EA) for the first phase of Generation 3 was completed on June 25, 2010. The Teleport Generation 3 Phase 1 EA assesses the costs and benefits of continuing Generation 3 Phase 1 in the joint Department of Defense Teleport Program versus having the military services pursue the same capabilities independently (Status Quo Baseline). This analysis was required as part of the pre-Milestone C documentation efforts that led to an Acquisition Decision Memorandum (ADM) for the Teleport Generation 3 program on September 13, 2010.

Firm, Fixed-Price Feasibility: The determination of the development/integration contract type was based on cost and technical risk associated with satisfying the requirement. When making the selection of contract type to execute the program's next acquisition phase, the Milestone Decision Authority will choose between fixed-price and cost-type contracts consistent with the level of cost and technical risk associated with the effort.

Independent Cost Estimate: Since the business case was last certified, the Milestone Decision Authority was delegated by Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD(AT&L)) to the DISA Component Acquisition Executive (CAE). In 2013, the DoD Teleport Generation 3 acquisition experienced a critical schedule change to its Phase 3 Milestone C date. Due to the delegation of decision authority, an independent cost estimate was not required as part of the critical change process. The DISA Component Financial Executive (CFE) provided a revised lifecycle cost estimate to Director of Cost and Assessment Program Evaluation (D,CAPE), factoring in the cost changes from the critical change. D,CAPE reviewed and approved this revised cost estimate.

Certification of Business Case Alignment; Explanation: I certify that all technical and business requirements have been reviewed and validated to ensure alignment with the business case. This certification is based on my review of the ORD, AoA, and EA described above.

Business Case Certification:

Name:	Mr. Alfred A. Schenck
Organization:	Defense Information Systems Agency for Teleport Gen 3
CAC Subject:	CN=SCHENCK.ALFRED.A.1057426639,OU=DISA,OU=PKI,OU=DoD,O=U.S. Government,C=US
Date:	3/7/2014 01:54 PM

Business Case Changes

There has been no significant change to the Business Case since it was last certified.

Program Status

Annual Report: The program is substantially on track to remain within the schedule, cost and performance thresholds identified in the Original Estimate; there have been no Significant or Critical Changes (as defined by 10 U.S.C. Chapter 144A) reported since the previous MAIS Annual Report to Congress.

The program recently achieved a FDD from the MDA on February 13, 2015.

Schedule

Schedule Events		
Events	**Original Estimate Objective**	**Current Estimate (Or Actual)**
Gen 3 MDD	Mar 2010	Mar 2010
Phase 1 MS C AEHF XDR	Aug 2010	Sep 2010
Phase 2 MS C WGS X/Ka	Jan 2012	Jun 2012
GEN 3 FDD[2]	Aug 2014	Feb 2015
Phase 3 MS C MUOS-Legacy[1]	TBD	TBD
GEN 3 FD	Jul 2019	Jul 2019

Memo

1/ Generation 3 Phase 3 MS C MUOS-Legacy revised program milestone dates are due to delays specific to the MUOS interface capability which will not be available in time to support the MLGC Operational Assessment. The Teleport Phase 3 MS C objective will occur within six months of a successful MLGC MS C decision. The threshold will occur within 12 months. A 12-month duration schedule threshold is based on the historical uncertainties of the MUOS program's MOT&E, thus warranting the duration between schedule objective and threshold.
2/ The MDA issued an ADM on February 13, 2015 granting approval of the FDD.

Acronyms and Abbreviations

MLGC - MUOS to Legacy UHF SATCOM Gateway Component
MOT&E - Multiservice Operational Test & Evaluation
MUOS - Mobile User Objective System
SATCOM - Satellite Communications
WGS - Wideband Global SATCOM
X/Ka - Dual X- and Ka-band
XDR - Extended Data Rate

Performance

Performance Characteristics		
Original Estimate Objective/Threshold		**Current Estimate (Or Actual)**
Coverage		
1. Teleports positioned to allow the Warfighter communications with at least three (3) DoD Teleports in all bands provided that satellite coverage exists for that area.	1. 365 days per year and 24 hours per day 2. In all latitudes between 65° North and 65° South (worldwide) 3. Teleports positioned to allow the Warfighter communications with at least two (2) DoD Teleports in all bands provided that satellite coverage exists for that area.	Will meet threshold
Capacity 1[1]		
1. Provide 100% of the projected 2004 required Legacy Tactical C4I services as identified in the GEN 3 ORD 2. Provide 100% of the projected 2010 required DISN Services to support two overlapping wars. 3. Provide 100% of the projected 2010 required SATCOM throughput to support two overlapping wars. 4. Provide 100% of the projected 2010 required Legacy Tactical C4I services as identified in the Gen 3 ORD Update.	1. Provide 100% of the projected 2004 required DISN services to support day-to-day operations and one SSC. 2. Provide 100% of the projected 2004 required SATCOM throughput to support day-to-day operations and one SSC. 3. Provide 100% of the projected 2006 required DISN services for one MCO. 4. Provide 100% of the projected 2006 required SATCOM throughput for one MCO.	Will meet threshold
Capacity 2[1]		
Provide 100% of the projected 2004 required DISN and SATCOM services to support one MCO within 30 days as identified in the ORD.	Provide 100% of the projected 2004 required DISN and SATCOM services to support one MCO within 30 days as identified in the ORD.	Will meet threshold
Interoperability 1		
Access to legacy Tactical C4I services identified in the Gen 3 ORD Update. Access to Legacy Tactical C4I systems identified in the Gen 3 ORD Update.	Access to voice (DSN and DRSN), data (SIPRNET, NIPRNET and JWICS) and video (VTC) services. Access to DISN POPs for on demand transport and COI services.	Will meet threshold
Interoperability 2		
Access to X, C, Ku Access to UHF Access to EHF (LDR / MDR) Access to Ka (Military) Access to Ka Commercial bands Access to EHF (XDR)	Access to X, C, Ku Access to UHF Access to EHF (LDR / MDR) Access to Ka (Military) Access to Ka Commercial bands Access to EHF (XDR)	Will meet objective
Interoperability 3		
100% accomplishment of all top-level IERs that directly interface the Teleport.	100% accomplishment of critical top-level IERs that directly interface the Teleport.	Will meet threshold
Interoperability 4		
Access to X, C, Ku bands Access to Ka (Military) Access to Ka commercial	Access to X, C, Ku bands Access to Ka (Military) Access to Ka commercial	Will meet objective
Interoperability 5		

Teleport shall provide the Warfighter access to network centric IP architecture.	Teleport shall provide the Warfighter access to network centric IP architecture.	Will meet objective
Interoperability 6		
Teleport architecture shall conform to the GRA for Transformational Communications.	Teleport shall be interoperable with IP routing requirements for tactical users in accordance with a DoD-wide standard IP routing architecture.	Will meet threshold
Protection 1		
Ensure timely, accurate, and controlled information access to authorized personnel while denying adversaries the opportunity to exploit friendly information and information systems for their own purpose.	The DoD Teleport must support information environment protection, attack detection, capability restoration, data integrity, and attack response IAW CJCSI 6510.01 Series. 2. The DoD Teleport must support bulk encryption / TRANSEC capabilities of DISN, Legacy Tactical C4I, and SATCOM Components.	Will meet objective
Protection 2[2]		
System shall meet and maintain minimum IA Defense in Depth Standards, including certification and accreditation IAW the DIACAP process CJCSI 6510.01C and DoDI 5200.40.	System shall meet and maintain minimum IA Defense in Depth Standards, including certification and accreditation IAW the DIACAP process CJCSI 6510.01C and DoDI 5200.40.	Will meet objective
Control and Network Management		
Automated and remote.	(A) Centralized control of all equipment with remote interfaces from one location on the floor, (B) electronic patching controllable from central location. (C) automated circuit redundancy where available within COTS product line.	Will meet threshold

Memo

DoD Teleport ORD, Generation 3 Update dated May 20, 2010.

1/ Capacity 2 Threshold. The DoD Teleport ORD, Generation 3 Update does not adequately address capacity for the Generation 3 Phases. For Generation 3 Phase 1, capacity threshold requirements are clarified by the “Joint Staff Teleport Generation 3 ORD Update Capacity” memo dated, July 8, 2010. For Generation 3 Phase 2, capacity threshold requirements are clarified by the "Satellite Throughput and Defense Information Services Network Requirements for Department of Defense Teleport Generation Three Phase Two" Memo dated December 16, 2010.

2/ Generation 3 is required to meet all RMF requirements. DIACAP references in Protection KPP were obsolete.

Acronyms and Abbreviations

C4I - Command, Control, Communications, Computers and Intelligence
CJCSI - Chairman, Joint Chief of Staff Instruction
COI - Communities of Interest
COTS - Commercial of the Shelf
DIACAP - DoD IA Certification and Accreditation Process
DISN - Defense Information Systems Network
DRSN - Defense Red Switch Network
DSN - Defense Switched Network
EHF - Extremely High Frequency
GRA - Government Reference Architecture
IAW - In Accordance With
IER - Information Exchange Requirement
JWICS - Joint Worldwide Intelligence Communications System
LDR - Low Data Rate
MCO - Major Combat Operations
MDR - Medium Data Rate
NIPRNET - Not Classified but Sensitive Internet Protocol Router Network
ORD - Operational Requirements Document
POP - Point of Presence
RMF - Risk Management Framework
SATCOM - Satellite Communications
SIPRNET - Secret Internet Protocol Router Network
SSC - Small Scale Contingence
TRANSEC - Transmission Security
UHF - Ultra High Frequency
VTC - Video Teleconference
XDR - Extended Data Rate

Cost

Teleport Gen 3				
Appropriation Category	BY 2010 $M		TY $M	
	Original Estimate	Current Estimate Or Actual	Original Estimate	Current Estimate Or Actual
Acquisition Cost				
RDT&E	17.1	18.2	18.1	19.3
Procurement	229.0	210.5	248.6	225.6
MILCON	8.4	8.5	9.6	9.6
Acq O&M	5.6	2.7	6.1	2.8
Total Acquisition Cost	260.1	239.9	282.4	257.3
Operating and Support (O&S) Cost				
Total Operating and Support (O&S) Cost	271.3	161.5	315.0	195.9
Total Life-Cycle Cost				
Total Life-Cycle Cost	531.4	401.4	597.4	453.2

Cost Notes

1. This report and the Budget Year IT-1 Exhibit cover different time periods thus the costs will not match.
2. Then Year dollars are included for information purposes only; cost variances will be reported against Base Year dollars.
3. The O&S costs reflect all work performed during that phase, regardless of the type or source of funding.